Sustaining biodiversity conservation in and around the Nyungwe National Park, Rwanda

REVISED PERFORMANCE MANAGEMENT PLAN

FEBRUARY 2012

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April 4, 2012

Cover Photo: Nyungwe National Park, by Aaron Nicholas, WCS

CONTENTS

ABBREVIATIONS

COTR   Contracting Officer's Technical Representative
DAI   Development Alternatives Inc.
KCCEM   Kitabi College of Conservation and Environmental Management
M&E   Monitoring and Evaluation
MEMS   Monitoring and Evaluation Management Services
MIST   Management for Information System
NNP   Nyungwe National Park
NRM   Natural Resource Management
PMP   Performance Management Plan
RBM   Ranger Based Monitoring
RDB   Rwanda Development Board
SO   Strategic Objective
USAID   U.S. Agency for International Development
WCS   Wildlife Conservation Society

A. INTRODUCTION

The successful implementation of any multi-year partnership agreement involves regular adaptive feedback. Lessons learned in the course of implementing and reporting on various activities have shown that there is a value in reflecting on how circumstances and situations evolve and what implications this may have on our meeting our originally defined targets. The Project Monitoring Plan (PMP) has been revised based on the experiences of implementing this grant over the course of the last 2-years. This document was compiled with the assistance of the Monitoring and Evaluation Management Services (MEMS). This revision also demonstrates more clearly linkages of the project indicators with Economic Growth (SO7) and U.S. Foreign Assistance "F"- indicators.

The changes presented here will allow for improved understanding of grant activities as well as measurement of achievements. For added clarity, the wording and / or definitions related to how these indicators and targets will be monitored has also been revised as per the indicator monitoring sheets presented in Annex B.

Ongoing progress will continue to be reported through quarterly and annual reports. Progress will also be reviewed with all key partners on a quarterly basis and feedback incorporated into future planning.

The overriding **goal** of this project is that *Rwanda benefits from the conservation of wildlife and sustainable use of ecosystem services in Nyungwe National Park*. The **principal objective** is *To improve the capacity of the Rwanda Development Board (RDB) to sustainably manage the park's resources and address specific threats (fire, poaching, timber harvesting) to the park and specific species of concern.* Site and policy activities have been developed with RDB to demonstrably strengthen RDB's capacity to manage the risks and opportunities in NNP.

B. PROJECT RESULTS CHART

Results Chart

Six strategies have been developed which together contribute towards the realization of Intermediate Result I.R. 7.4 (The improved management of selected ecosystems) through two main Sub-Intermediate Results (I.R. 7.4.1 Improved capacity to sustainably manage ecosystems and I.R. 7.4.2 Increased value of ecosystem services). In turn, these Results support the realization of USAID's Strategic Objective 7 related to expanded economic opportunities in rural areas. Strategies 3 and 4 of the Cooperative Agreement also contribute to the cross-cutting Sub-I.R. related to Improved Policy Environment.

The chart below captures the above.
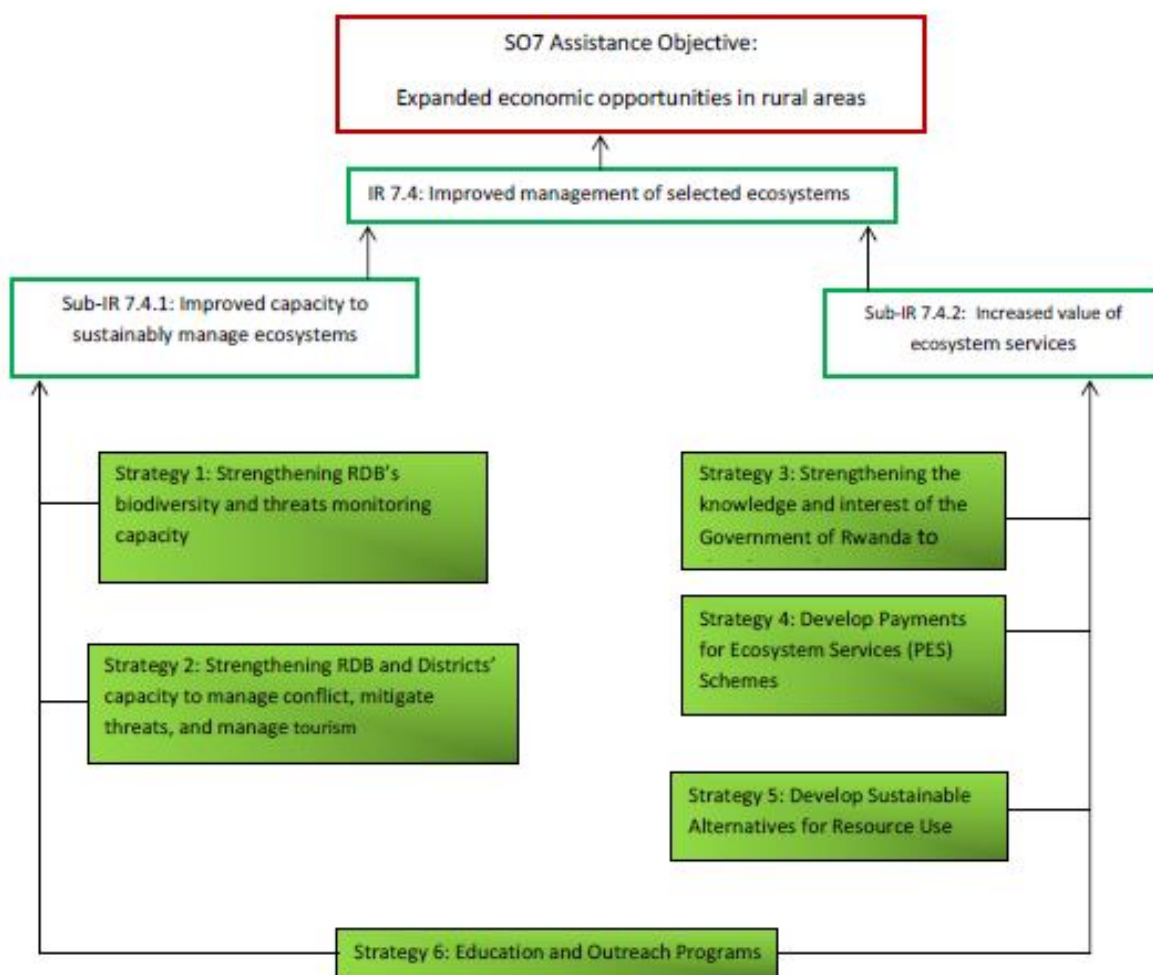
Project contribution to Standard F indicators

Under the US Foreign Assistance Framework, the project contributes to the Program element 4.8.1. Natural Resources and Biodiversity of the Program Area 4.8: Environment under the Functional Objective 4: Economic Growth.

The project is funded by biodiversity earmarked funds and contributes indirectly to the Sustainable Landscape Pillar of Global Climate Change initiative. Through the life of the project, the standards F indicators listed in table 2 below will be monitored.

Table 1: F Biodiversity Standard Indicators

Indicator/
Program element 4.8.1. Natural Resources and Biodiversity
Indicator 4.8.1-1. Number of hectares in areas of biological significance and/or natural resource showing improved biophysical conditions as a result of USG assistance
Indicator 4.8.1-27. Number of people receiving USG supported training in natural resources management and/or biodiversity conservation
Program element 4.8.2. Clean Productive Environment
Indicator 4.8.2-14. Number of institutions with improved capacity to address climate change issues as a result of USG assistance

C. PROJECT PERFORMANCE INDICATORS

As illustrated in the above, the project objective is addressed through six strategies supported by several outputs for which a subset of performance indicators have been developed to track progress. Selected performance indicators are in most cases F indicators; however, a few custom indicators have been selected to monitor progress of some of the project activities where standard indicators were found not sufficient to monitor progress towards achieving the project's principal objective.

Tables 1 through 3 below present performance indicators by: Strategic Objective (SO); indicator, definition and disaggregation; data source; baseline and year baseline was established; method of data collection/calculation; method of data acquisition, data analysis, use and reporting; and end of project targets.

Annex A provides performance monitoring reference sheets.

Indicators for each Strategy:

Strategy 1 – RDB capacity strengthened for biodiversity and threats monitoring

- Number of people receiving USG supported training in natural resources management and/or biodiversity conservation. This indicator brings together different training activities aimed at strengthening biodiversity monitoring capacity of RDB staff:
  - Number of RDB rangers trained in biological survey data collection and analysis;
  - Number of rangers trained in law enforcement and threat monitoring with USG support;
  - Number of RDB park staff trained in conflict resolution and threat mitigation with USG support.
- Percentage of RDB patrols guided by Ranger Based Monitoring (RBM) / Management for Information System (MIST) data;
- Number of illegal activities detected per ranger-month monitoring effort;
- Number of coordinated Nyungwe-Kibira patrols;
- Number of days of USG funded technical assistance in climate change provided to counterparts or stakeholders.

Strategy 2 – RDB and districts capacity to manage conflict, mitigate threats and manage tourism is strengthened
- Number of people receiving USG supported training in natural resources management and/or biodiversity conservation. This indicator brings together different training activities aimed at strengthening capacity of RDB and districts to manage conflicts:
  - Number of district leaders (DEOs) and community liaison agents (ANICOs) trained in conflict resolution and threat mitigation skills with USG support;
  - Number of RDB staff trained to manage and mitigate tourism impacts, and low impact wildlife primate habituation and guiding with USG support.

Strategy 3 –Strengthening the knowledge and interest of the Government of Rwanda to develop and support PES policies
- Number of people receiving USG supported training in natural resources management and/or biodiversity conservation. This indicator will capture training activities related to PES for GOR staff and other stakeholders;
- Number of relevant PES policies, regulations drafted and implemented.

Strategy 4 – Develop Payments for Ecosystem Services (PES) schemes
- Number of agreements to allow for payment for watershed services signed;
- Number of carbon PES projects assessed and implemented.

Strategy 5 – Develop Sustainable Alternatives for Resource Use
- Number of households signing agreements and obtaining bamboo from woodlots;
- Percentage of 200 households with access and use of energy efficient stoves.

Strategy 6 – Education and Outreach
- Percentage of surveyed students who demonstrate an improvement in their attitude towards NNP;
- Number of target students participating in the program with USG assistance;
- Number of teachers / educators trained with USG assistance;
- Percentage of surveyed community members who have supportive attitude towards NNP;
- Number of individuals participating in the program with USG assistance;
- Number of target community educators and communicators trained with USG assistance.

Revised project indicators

WCS proposes to change and/or revise the following indicators. For each proposed change, the following is provided: the old indicator (in red), the proposed new or modified indicator (in green), the unit of measure, definition, and the rationale for change.

Table 2: Revised indicators in this PMP

Old Indicator	New indicator	Rationale for Changing
7.1 - Percent change in rural income of targeted population		We are not able to change an SO7 level indicator. It should be noted that our activities do not contribute towards this USAID's SO7 indicator. We are therefore proposing not to monitor this.
Number of people receiving USG supported training in global climate change (including Framework Convention on Climate Change, greenhouse gas inventories, mitigation and adaptation analysis). And Outputs of participatory workshop circulated and management options known	4.8.2-27 Number of days of USG funded technical assistance in climate change provided to counterparts or stakeholders.	Climate change interventions executed under this agreement will focus on building capacity at field-level, especially amongst park staff involved with monitoring, research and park management and as such, this indicator is more appropriate.
(1) Training system in place. (2) Percent of rangers trained.	4.8.1-27 Number of people receiving USG supported training in natural resource management and/or biodiversity conservation.	This indicator is clearer than the original.
Number of hectares in NNP showing improved condition	4.8.1-1 Number of hectares in areas of biological significance showing improved biophysical conditions as a result of USG assistance.	There was previously duplication of this indicator at both F and strategy level. It is now to be maintained only at F-level.
RBM training sessions and monitoring workshops	4.8.1-27 Number of people receiving USG supported training in natural resource management and/or biodiversity conservation.	Tracking the effective number of people trained and not limiting this analysis to training session or workshops helps to capture more the impact of the capacity building efforts of the project.

Old Indicator	New indicator	Rationale for Changing
Percentage of park staff using conflict resolution and threat mitigation skills	4.8.1-27 Number of people receiving USG supported training in natural resource management and/or biodiversity conservation.	Park rangers are often involved in managing conflict, for example dealing with issues such as human-wildlife conflict or disagreements related to access to various natural resources. With improved understanding of how to manage such situations, conflicts should be more easily resolved, at an earlier stage and in a way that maintains a relationship of respect between all parties.
Number of illegal activities detected per ranger-week monitoring effort	Number illegal activities detected per ranger-month monitoring effort	Patrol feedback is received from various ranger posts on a monthly and not weekly basis.
New indicator	Number of coordinated Nyungwe-Kibira RBM patrols	An indicator measuring the extent of coordination between Protected Area authorities in an effort to resolve common border conflicts and reduce threats to natural resources. Transboundary patrols are needed for more effective protection and management of the vulnerable area of NNP bordering with Kibira NP in Burundi. The number of coordinated patrols conducted will indicate successful coordination and capacity to conduct monitoring as a result of this project.
Number of RDB staff trained to prevent deleterious impacts of tourism developments with USG support	4.8.1-27 Number of people receiving USG supported training in natural resource management and/or biodiversity conservation	This indicator more comprehensively captures the training inputs planned related to mitigating the possible impact of the growing tourism market on Nyungwe National Park.
Percentage of 200 surveyed households with access to non-NNP fuel sources	Percentage of pilot households with access to energy saving stoves	This is a clearer indicator than originally proposed.
Percentage of 200 students that value NNP	Percentage of 200 surveyed students who demonstrate an improvement in their attitude toward NNP	This revision is proposed based on the fact that attitude changes are more easily tracked than indicators of value.
New indicator	Number of target students participating in the program with USG assistance	This will give a clearer picture of the overall impact of the conservation education work.
New indicator	Number of target teachers/educators trained with USG assistance	This will tell us how many educators have been trained- an important issue related to the sustainability of this work.
Percentage of 200 out-of-school youth and other vulnerable groups that value NNP	Percentage of 200 surveyed community members who have supportive attitude towards NNP	An indicator measuring the reach or spread of USG human capacity building assistance through increasing awareness among user groups. It would have been impossible to accurately measure the previous indicator.
New Indicator	Number of target community educators and communicators trained with USG assistance	An indicator measuring the reach or spread of USG human capacity building assistance through providing educators with the

Old Indicator	New indicator	Rationale for Changing
		necessary skills to educate vulnerable groups on issues relevant to biodiversity conservation.

Table 3: Proposed revised cumulative life of project targets

PERFORMANCE INDICATOR			BASELINE DATA (CY)		CUMULATIVE TOTALS BY CALENDAR YEAR (CY)									
					Year 1: 2010-11		Year 2: 2011-12		Year 3: 2012-13		Year 4: 2013-14		Year 5: 2014-15	
Indicator	Unit of Measure	Baseline Year	Baseline Value		Target Year 1	Actual Year 1	Target Year 2	Actual Year 2	Target Year 3	Actual Year 3	Target Year 4	Actual Year 4	Target Year 5	Actual Year 5
Project Objective: To improve the capacity of RDB to sustainably manage the park's resources and address specific threats (fire, poaching, timber harvesting) to the park and specific species of concern														
STRATEGIC OBJECTIVE 7: EXPANDED ECONOMIC OPPORTUNITIES IN RURAL AREAS														
F Biodiversity Standard Indicators														
Indicator: Number of hectares in areas of biological significance showing improved biophysical conditions as a result of USG assistance.	#	2009	**0**		3		107.3[1]		211.6		315.9		420.2	
Indicator : Number of people receiving USG supported training in natural resources management and/or biodiversity conservation:[2]	#	2009	0		30	138	118		323		537		537	
Indicator: Number of policies, laws, agreements or regulations promoting sustainable natural resource management and conservation that are implemented as a result of USG assistance	#	2009	0		**0**	**0**	**0**	**0**	1[3]		2[4]		3[5]	
Indicator: Number of days of USG funded technical assistance in climate change provided to	#	2009	0		2	2	0	0	4		4		4	

[1] 1,013 ha was estimated to have been affected by habitat influencing illegal activities in the baseline year of 2009. The target is to reduce the area affected by 10% per year. In addition to this, 3ha of ferns will be manually cut each year and this habitat improvement is also captured by adding this to the above.

[2] See Appendix B for details of how these numbers were calculated

[3] Agreement to market carbon from assisted regeneration secured

[4] Agreement signed with cooperatives for access to bamboo seedlings in Ruhero and Busanze sectors

[5] PES policy approved by GoR

PERFORMANCE INDICATOR		BASELINE DATA		CUMULATIVE TOTALS BY CALENDAR YEAR (CY)									
		(CY)		Year 1: 2010-11		Year 2: 2011-12		Year 3: 2012-13		Year 4: 2013-14		Year 5: 2014-15	
Indicator	Unit of Measure	Baseline Year	Baseline Value	Target Year 1	Actual Year 1	Target Year 2	Actual Year 2	Target Year 3	Actual Year 3	Target Year 4	Actual Year 4	Target Year 5	Actual Year 5
counterparts or stakeholders													

Strategy 1: Strengthening RDB's Biodiversity and Threats Monitoring Capacity

Output 2. Capacity in law enforcement and threat monitoring and assessment is strengthened

Indicator	Unit of Measure	Baseline Year	Baseline Value	Target Year 1	Actual Year 1	Target Year 2	Actual Year 2	Target Year 3	Actual Year 3	Target Year 4	Actual Year 4	Target Year 5	Actual Year 5
Indicator: Percentage of RDB patrols guided by analysis of MIST data	%	2009	0	20%		25%		30%		35%		40%	

Output 3. Capacity to manage fire and monitor mining and resource use impacts are in place

Indicator	Unit of Measure	Baseline Year	Baseline Value	Target Year 1	Actual Year 1	Target Year 2	Actual Year 2	Target Year 3	Actual Year 3	Target Year 4	Actual Year 4	Target Year 5	Actual Year 5
Indicator : Number illegal activities detected per ranger-month monitoring effort	#	2009	0.34[6]	0.31		0.28		0.25		0.22		0.20	
Indicator: Number of coordinated Nyungwe-Kibira RBM patrols	#	2009	0		0	1	1	4		7			

Strategy 5: Develop Sustainable Alternatives for Resource Use

Output 1: Improved energy efficiency in villages around Nyungwe from introduction of fuel efficient stoves and alternative fuel sources

Indicator	Unit of Measure	Baseline Year	Baseline Value	Target Year 1	Actual Year 1	Target Year 2	Actual Year 2	Target Year 3	Actual Year 3	Target Year 4	Actual Year 4	Target Year 5	Actual Year 5
Indicator: Percentage of 200 pilot households with access and use of energy efficient stoves	%	2011	0	0		0		50%		75%		100%	

Strategy 6: Implement Education and Outreach Programs

Output 1: Students in formal education will adopt a positive/supportive attitude to park conservation efforts based on a clear understanding of the multiple values of NNP, reduce the adoption of unsustainable behaviors as they grow into adults, and act as advocates for the value of the Park and its conservation

Indicator	Unit of Measure	Baseline Year	Baseline Value	Target Year 1	Actual Year 1	Target Year 2	Actual Year 2	Target Year 3	Actual Year 3	Target Year 4	Actual Year 4	Target Year 5	Actual Year 5
Indicator: Percentage of surveyed students who demonstrate an improvement in their attitude toward NNP[7]	%	2011	82%									95%[8]	
Indicator: Number of target students participating in the program with USG	#	2011	0	0		0		2,000		4,000		4,000	

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[6] This represents 0.34 illegal activities per km walked

[7] The baseline of 82% refers to the number of students who said that Nyungwe National Park i) Should be protected, ii) Is better as a park than as farmland, iii) Is important for the production of water and iv) Is an area that is important to tourists.

[8] This will only be re-assessed in year 5 when the initial baseline survey is repeated.

Performance Indicator		Baseline Data		Cumulative Totals by Calendar Year (CY)									
		(CY)		Year 1: 2010-11		Year 2: 2011-12		Year 3: 2012-13		Year 4: 2013-14		Year 5: 2014-15	
Indicator	Unit of Measure	Baseline Year	Baseline Value	Target Year 1	Actual Year 1	Target Year 2	Actual Year 2	Target Year 3	Actual Year 3	Target Year 4	Actual Year 4	Target Year 5	Actual Year 5
assistance													
Indicator: Number of target teachers/educators trained with USG assistance	#	2011	0	0	0	0	0	20		40		40	
Output 2: Education Output 2: Vulnerable groups (community members responsible for threat behaviors in NNP) adopt a supportive attitude to the park and change their behavior based on understanding of the multiple values of NNP													
Indicator: Percentage of surveyed community members who have supportive attitude towards NNP[9]	%	2011	72%									95%[10]	
Indicator: Number of individuals participating in the program with USG assistance	#	2009	0	0	0	0		1,000		2,000		3,000	
Indicator: Number of target community educators and communicators trained with USG assistance	#	2011	0	0	0	58	0	58		58		58	

[9] The baseline of 72% refers to the number of respondents who said that Nyungwe National Park provides some form of benefits to surrounding communities.
[10] This will only be re-assessed in year 5 when the initial baseline survey is repeated.

ANNEX A: PERFORMANCE INDICATOR REFERENCE SHEETS FOR PROJECT PERFORMANCE INDICATORS

Performance Indicator Reference Sheet
Number of hectares in areas of biological significance showing improved biophysical conditions as a result of USG assistance

Strategic Objective: Expanded economic opportunities in rural areas

Intermediate Result 7.4: Improved management of selected ecosystems
Program Objective: Economic Growth
Program Area: Environment Program
Program Element: 4.8.1- Natural Resources and Biodiversity
Sub-Element: 4.8.1.2- Sustainable Natural Resources Management and Production
Indicator: Number of hectares in areas of biological significance showing improved biophysical conditions as a result of USG assistance

DESCRIPTION

Precise Definition(s): Improved biophysical conditions are demonstrated where there is biophysical monitoring data showing stability, improvement, or slowing the rate of decline in one or more selected natural resources parameters over time.

Unit of Measure: Number of hectares

Disaggregated by:

Justification/Management Utility: A standardized indicator measuring impact of interventions. A spatial indicator is an appropriate measure of the scale of impact of NRM interventions. The standard of monitoring biophysical improvement permits demonstration of ultimate positive environmental impact as a result of USG interventions.

PLAN FOR DATA ACQUISITION BY USAID

Data Collection Method: RBM results will provide the basis for calculating the area affected by habitat-influencing illegal activities (fire, encroachment, mining). Point data for the occurrence of these illegal activities will be analyzed using various GIS approaches, using buffers to take account of the likely geographical impact of different activities. The expectation is that there is a 10% reduction in the extent of illegal activities/year throughout the course of this grant from the 2009 baseline. In addition, an on the ground estimates of areas cleared of ferns for natural regeneration will also be considered as areas improved and will be added to the area calculated above.

Data Source(s): WCS, RDB

Frequency/Timing of Data Acquisition: Every 5 years (remote sensing). Quarterly (RBM)

Estimated Cost of Data Acquisition: High (remote sensing), Medium (RBM)

Responsible Individual(s) at USAID: AOR

PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING

Data Analysis: Comparison of fern extent over time and encounter rates and areas affected by illegal activities

Presentation of Data: Data presented in quarterly and annual reports

Review of Data: AOR review

Reporting of Data: Quarterly and Annual report

DATA QUALITY ISSUES

Date of Initial Data Quality Assessment: January 2011

Known Data Limitations and Significance (if any): It will be too expensive to purchase satellite imagery regularly for monitoring the extent of ferns once assisted regeneration activities are started- this will therefore only be done in year 5 of the project as a comparison to the 2009 baseline.

Actions Taken or Planned to Address Data Limitations: Remote sensing analysis at the end of year 5

Date of Future Data Quality Assessments: To be confirmed with MEMS

Procedures for Future Data Quality Assessments: Annual review by COP and M&E Manager

BASELINE AND TARGETS: In 2009 1,013ha were affected by habitat influencing illegal activities. A 10% reduction in the area affected per year is the target set. In addition, areas improved through fern clearance will also be considered to have been improved and will be added to the area calculated as having been improved above.

Location of Data Storage: Gisakura

THIS SHEET LAST UPDATED ON: April 2012

Performance Indicator Reference Sheet
Number of people receiving USG supported training in natural resources management and/or biodiversity conservation

Strategic Objective: Expanded economic opportunities in rural areas

Intermediate Result 7.4: Improved management of selected ecosystems

Program Objective: Economic Growth

Program Area: Environment Program

Program Element: 4.8.1- Natural Resources and Biodiversity

Sub-Element: 4.8.1.2- Sustainable Natural Resources Management and Production

Indicator: Number of people receiving USG supported training in natural resources management and/or biodiversity conservation

DESCRIPTION

Precise Definition(s):

The number of individuals participating in learning activities intended for teaching or imparting knowledge and information on natural resources management and biodiversity conservation to the participants with designated instructors or lead persons, learning objectives, and outcomes, conducted fulltime or intermittently. NRM and biodiversity conservation training can consist of transfer of knowledge, skills, or attitudes through structured learning and follow-up activities, or through less structured means, to solve problems or fill identified performance gaps. Training can consist of long-term academic degree programs, short- or long-term non-degree technical courses in academic or in other settings, non-academic seminars, workshops, on-the-job learning experiences, observational study tours, or distance learning exercises or interventions.

This indicator will combine the following:

Number of RDB rangers trained in biological survey data collection and analysis;

Number of RDB rangers trained in law enforcement and threat monitoring;

Number of RDB staff trained in conflict resolution and threat mitigation;

Number of District leaders (DEOs) and community liaison agents (ANICOs) trained in conflict resolution and threat mitigation skills;

Number of RDB staff trained in PES and new revenue sharing

Number of government staff, civil society & private sector employees trained in PES design.

Unit of Measure: Number of people attending various training sessions.

Disaggregated by: Sex (male/female)

Justification/Management Utility: Tracking the number of people trained in NRM/Biodiversity Conservation provides information about the reach and scale of training and capacity building

PLAN FOR DATA ACQUISITION BY USAID

Data Collection Method: Using attendance sheets to track individuals attending training seminars, workshops, including: administrators/officials, learners enrolled (students/community members), educators/instructors, Protected Area staff

Data Source(s): WCS training reports

Frequency/Timing of Data Acquisition: Quarterly

Estimated Cost of Data Acquisition: Low

Responsible Individual(s) at USAID: AOR

PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING

Data Analysis: Simple count
Presentation of Data: Data presented in quarterly and annual reports
Review of Data: AOR review
Reporting of Data: Quarterly and Annual report

DATA QUALITY ISSUES
Date of Initial Data Quality Assessment: January 2011 Known Data Limitations and Significance (if any):   N/A Actions Taken or Planned to Address Data Limitations: N/A Date of Future Data Quality Assessments: To be confirmed with MEMS Procedures for Future Data Quality Assessments: Annual review by COP and M & E Manager
BASELINE AND TARGETS: The 2009 baseline was zero. Targets of 30 (year 1), 88 (year 2), 205 (year 3) and 214 (year 4)[11]
Location of Data Storage: Gisakura
THIS SHEET LAST UPDATED ON: April 2012

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[11] See below for details of how targets were calculated:

Number of RDB rangers trained in biological survey data collection and analysis
Baseline value and year: 2009, 0

Targets	Year 1	Year 2	Year 3	Year 4	Year 5
	15	31	62	78	78

Number of rangers trained in law enforcement and threat monitoring with USG support
Baseline value and year: 2009, 0

Targets	Year 1	Year 2	Year 3	Year 4	Year 5
	15	31	62	78	78

Number of RDB parks staff trained in conflict resolution and threat mitigation with USG support
Baseline value and year: 2009, 0

Targets	Year 1	Year 2	Year 3	Year 4	Year 5
	0	20	41	41	41

Number of District leaders (DEOs) and community liaison agents (ANICOs) trained in conflict resolution and threat mitigation skills with USG support
Baseline value and year: 2009, 0

Targets	Year 1	Year 2	Year 3	Year 4	Year 5
	0	0	31	58	58

Number of RDB staff trained to manage & mitigate tourism impacts, and low wildlife impact primate habituation and guiding with USG support
Baseline value and year: 2009, 0

Targets	Year 1	Year 2	Year 3	Year 4	Year 5
	0	3	10	10	10

Number of senior RDB staff trained in PES design with USG support
Baseline value and year: 2009, 0

Targets	Year 1	Year 2	Year 3	Year 4	Year 5
	0	3	6	6	6

Performance Indicator Reference Sheet
Number of policies, laws, agreements or regulations promoting sustainable natural resource management and conservation that are implemented as a result of USG assistance

Strategic Objective: Expanded economic opportunities in rural areas

Intermediate Result 7.4: Improved management of selected ecosystems
Program Objective: Economic Growth
Program Area: Environment Program
Program Element: 4.8.1- Natural Resources and Biodiversity
Sub-Element: 4.8.1.2- Sustainable Natural Resources Management and Production

Indicator: Number of policies, laws, agreements or regulations promoting sustainable natural resource management and conservation that are implemented as a result of USG assistance

DESCRIPTION

Precise Definition(s):
The number of policies, laws, regulations and agreements passed / signed related to both carbon-related and non-carbon (water) related PES projects.

This indicator will combine the following:
Number of relevant PES policies, regulations drafted and implemented
Number of agreements to allow for payment for watershed services signed
Number of carbon PES projects assessed and implemented
Number of agreements signed with cooperatives for obtaining / managing bamboo seedlings

Unit of Measure: Number of policies or agreements passed / signed

Disaggregated by: Carbon and non-carbon projects

Justification/Management Utility: Tracking the number of policies, laws, regulations and agreements passed / signed will provide an indication of the level of preparedness and adoption of the GoR for PES approaches

PLAN FOR DATA ACQUISITION BY USAID

Data Collection Method: These factors will be tracked through the meetings of the PES Technical Task Force each quarter

Data Source(s): PES Task-Force minutes of meetings, and copies of actual agreements etc

Frequency/Timing of Data Acquisition: Quarterly

Estimated Cost of Data Acquisition: Low

Responsible Individual(s) at USAID: AOR

PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING

Data Analysis: Simple count

Presentation of Data: Data presented in quarterly and annual reports

Review of Data: AOR review

Reporting of Data: Quarterly and Annual report

DATA QUALITY ISSUES

Date of Initial Data Quality Assessment: Not yet completed
Known Data Limitations and Significance (if any): N/A
Actions Taken or Planned to Address Data Limitations: N/A
Date of Future Data Quality Assessments: To be confirmed with MEMS

Procedures for Future Data Quality Assessments: Annual review by COP and M & E Manager

BASELINE AND TARGETS: The 2009 baseline was zero. Targets of 1 (year 3), 2 (year 4), 3 (year 5)[12]
Location of Data Storage: Gisakura
THIS SHEET LAST UPDATED ON: April 2012

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[12] See below for details of how targets were calculated:

Number of relevant PES policies, regulations drafted and implemented
Baseline value and year: 2009, 0

Targets	Year 1	Year 2	Year 3	Year 4	Year 5
	0	0	0	1	1

Number of agreements to allow for payment for watershed services signed
Baseline value and year: 2009, 0

Targets	Year 1	Year 2	Year 3	Year 4	Year 5
	0	0	0	1	1

Number of carbon PES projects assessed and implemented
Baseline value and year: 2009, 0

Targets	Year 1	Year 2	Year 3	Year 4	Year 5
	0	0	0	1	1

Performance Indicator Reference Sheet
Number of days of USG funded technical assistance in climate change provided to counterparts or stakeholders

Strategic Objective: Expanded economic opportunities in rural areas

Intermediate Result 7.4: Improved management of selected ecosystems
Program Objective: Economic Growth
Program Area: Environment Program
Program Element: 4.8.1- Natural Resources and Biodiversity
Sub-Element: 4.8.1.2- Sustainable Natural Resources Management and Production
Indicator: Number of days of USG funded technical assistance in climate change provided to counterparts or stakeholders

DESCRIPTION

Precise Definition(s):
This indicator related to technical capacity building undertaken by WCS Climate Monitoring Specialist Dr Anton Seimon for key RDB staff in relation to climate monitoring for improved park management.

Unit of Measure: Number of days of technical assistance provided in each reporting period. Rounded up or down into whole numbers.

Disaggregated by: Gender of those participating
Justification/Management Utility: This provides an indication of the extent of climate change technical advice and training provided for key partners

PLAN FOR DATA ACQUISITION BY USAID

Data Collection Method: The number of days will be estimated from a) technical advice provided and b) number of training days provided
Data Source(s): Training reports and minutes of technical meetings held
Frequency/Timing of Data Acquisition: Quarterly
Estimated Cost of Data Acquisition: Low
Responsible Individual(s) at USAID: AOR

PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING

Data Analysis: Simple count

Presentation of Data: Data presented in quarterly and annual reports

Review of Data: AOR review

Reporting of Data: Quarterly and Annual report

DATA QUALITY ISSUES

Date of Initial Data Quality Assessment: Not yet completed
Known Data Limitations and Significance (if any): N/A
Actions Taken or Planned to Address Data Limitations: N/A
Date of Future Data Quality Assessments: To be confirmed with MEMS
Procedures for Future Data Quality Assessments: Annual review by COP and M & E Manager

BASELINE AND TARGETS: The 2009 baseline was zero. Targets of 2 (year 1) and 4 (year 3)

Location of Data Storage: Gisakura

Performance Indicator Reference Sheet
Percentage of RDB patrols guided by analysis of MIST data

Strategic Objective: Expanded economic opportunities in rural areas

Intermediate Result 7.4: Improved management of selected ecosystems
Program Objective: Economic Growth
Program Area: Environment Program
Program Element: 4.8.1- Natural Resources and Biodiversity
Sub-Element: 4.8.1.2- Sustainable Natural Resources Management and Production
Indicator 7.1.2.4: Percent of RDB patrols guided by analysis of MIST data

DESCRIPTION

Precise Definition(s): The number of RDB patrols deployed based on results of a MIST output dived by the total number of RDB patrols
Unit of Measure: Percentage
Disaggregated by: N/A
Justification/Management Utility: MIST (Management Information System) is one of the most common and effective tools for identifying threats in real time in protected areas as well as monitoring patrol effort. The outputs of MIST allow PA managers to adaptively manage their protection efforts and proactively target areas of particular risk and areas that have been neglected, thereby increasing patrol coverage and efficacy. The more patrols that are guided by MIST outputs rather than random assignment indicates greater capacity on the part of RDB to effectively use and implement MIST for threats monitoring

PLAN FOR DATA ACQUISITION BY USAID

Data Collection Method: RDB monthly reports of patrol location and MIST outputs
Data Source(s): Project reports
Frequency/Timing of Data Acquisition: Monthly
Estimated Cost of Data Acquisition: Low
Responsible Individual(s) at USAID: AOR

PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING

Data Analysis: Internal and external reviews, briefings, and reports

Presentation of Data: Annual report

Review of Data: MEMS Review reports

Reporting of Data: Annual report

DATA QUALITY ISSUES

Date of Initial Data Quality Assessment: January 2011
Known Data Limitations and Significance (if any): None
Actions Taken or Planned to Address Data Limitations: N/A
Date of Future Data Quality Assessments: To be confirmed by MEMS
Procedures for Future Data Quality Assessments: Annual review by COP and M & E Manager

BASELINE AND TARGETS: 2009 baseline was 0.34 illegal activities/km walked. Target of 0.20 illegal activities/km walked by end year 5 (10% reduction from baseline in each year of project implementation)

Location of Data Storage: Gisakura

THIS SHEET LAST UPDATED ON: April 2012

Performance Indicator Reference Sheet
Number of illegal activities detected per ranger-month effort

Strategic Objective: Expanded economic opportunities in rural areas

Intermediate Result 7.4: Improved management of selected ecosystems

Program Objective: Economic Growth

Program Area: Environment Program

Program Element: 4.8.1- Natural Resources and Biodiversity

Sub-Element: 4.8.1.2- Sustainable Natural Resources Management and Production

Indicator 7.1.2.4: Number of illegal activities detected per ranger-month effort

DESCRIPTION

Precise Definition(s): Encounter rate of signs of illegal activities (i.e. poaching, mining, fire etc.) per ranger month

Unit of Measure: Number

Disaggregated by: N/A

Justification/Management Utility: An indicator of effectiveness of the capacity to monitor and prevent the impact of illegal activities

PLAN FOR DATA ACQUISITION BY USAID

Data Collection Method: Monthly RBM reports

Data Source(s): Project reports / RDB records

Frequency/Timing of Data Acquisition: Monthly

Estimated Cost of Data Acquisition: Low

Responsible Individual(s) at USAID: AOR

PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING

Data Analysis: Research & Monitoring Warden, RDB

Presentation of Data: Annual report

Review of Data: MEMS Review reports

Reporting of Data: Annual report

DATA QUALITY ISSUES

Date of Initial Data Quality Assessment: January 2011

Known Data Limitations and Significance (if any): None

Actions Taken or Planned to Address Data Limitations: N/A

Date of Future Data Quality Assessments: To be confirmed by MEMS

Procedures for Future Data Quality Assessments: Annual review by COP and M & E Manager

BASELINE AND TARGETS: 2009 baseline was zero. Target of 40% by the end of project (20% year 1, 25% year 2, 30% year 3, 35% year 4)

Location of Data Storage: Gisakura

THIS SHEET LAST UPDATED ON: April 2012

| **Performance Indicator Reference Sheet** |
| **Number of coordinated Nyungwe-Kibira patrols per year** |

Strategic Objective: Expanded economic opportunities in rural areas

Intermediate Result 7.4: Improved management of selected ecosystems
Program Objective: Economic Growth
Program Area: Environment Program
Program Element: 4.8.1- Natural Resources and Biodiversity
Sub-Element: 4.8.1.2- Sustainable Natural Resources Management and Production
Indicator: Number of coordinated Nyungwe-Kibira RBM patrols per year

DESCRIPTION

Precise Definition(s): Number of patrols conducted consisting of rangers from Kibira NP, Burundi, and RDB rangers

Unit of Measure: Number

Disaggregated by: N/A

Justification/Management Utility: An indicator measuring the extent of coordination between PA authorities in an effort to resolve common border conflicts and reduce threats to natural resources. Transboundary patrols are needed for more effective protection and management of the vulnerable area of NNP bordering with Kibira NP in Burundi. The number of coordinated patrols conducted will indicate successful coordination and capacity to conduct monitoring as a result of this project

PLAN FOR DATA ACQUISITION BY USAID

Data Collection Method: Data will be collected from RDB records

Data Source(s): Project reports/RDB records

Frequency/Timing of Data Acquisition: Quarterly

Estimated Cost of Data Acquisition: Low

Responsible Individual(s) at USAID: AOR

PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING

Data Analysis: Internal and external reviews, briefings, and reports

Presentation of Data: Annual report

Review of Data: AOR reviews

Reporting of Data: Annual report

DATA QUALITY ISSUES

Date of Initial Data Quality Assessment: January 2011

Known Data Limitations and Significance (if any): None

Actions Taken or Planned to Address Data Limitations: N/A

Date of Future Data Quality Assessments: To be confirmed with MEMS

Procedures for Future Data Quality Assessments: Annual review by COP and M & E Manager

BASELINE AND TARGETS: 2009 baseline was zero. Target of 1 per quarter from year 3 onwards

Location of Data Storage: Gisakura

THIS SHEET LAST UPDATED ON: April 2012

Performance Indicator Reference Sheet
Percentage of 200 surveyed students who demonstrate improvement in attitude toward NNP

Strategic Objective: Expanded economic opportunities in rural areas
Intermediate Result: Improved management of selected ecosystems
Program Objective: Economic Growth
Program Area: Environment Program
Program Element 4.8.1- Natural Resources and Biodiversity
Sub-Element4.8.1.2- Sustainable Natural Resources Management and Production
Indicator: Percentage of surveyed students who demonstrate an improvement in their attitude toward NNP

DESCRIPTION

Precise Definition(s): Percentage of 200 students surveyed who exhibit a positive change in ascribing value to NNP as measured by their response based on the assessment of value based on the park as 1) a home for animals, 2) a tourist destination, 3) an important source of water, 4) an important source of clean air, 5) the role it plays in absorbing carbon and reducing global warming, 6) providing aesthetic/scenic/peaceful value, 7) providing soil services, and 8) providing educational value.

Unit of Measure: Percentage 0f 200 surveyed students

Disaggregated by: N/A

Justification/Management Utility: An indicator measuring the effectiveness of education and outreach efforts by assessing the change in attitude towards the park. The difference between baseline and post project responses by students describing how they attribute value to the park will establish whether the project has had a positive influence in changing attitudes. An improvement in the value that children ascribe to the park is expected to ultimately lead to better practices.

PLAN FOR DATA ACQUISITION BY USAID

Data Collection Method: Survey
Data Source(s): Repeat of baseline survey
Frequency/Timing of Data Acquisition: Repeat of baseline survey that was conducted in year 1 in year 5
Estimated Cost of Data Acquisition: Medium
Responsible Individual(s) at USAID: AOR

PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING

Data Analysis: Internal and external reviews, briefings, and reports

Presentation of Data: Annual report

Review of Data: AOR review

Reporting of Data: Annual report

DATA QUALITY ISSUES

Date of Initial Data Quality Assessment: January 2011
Known Data Limitations and Significance (if any): None
Actions Taken or Planned to Address Data Limitations: N/A
Date of Future Data Quality Assessments: To be confirmed with MEMS
Procedures for Future Data Quality Assessments: Annual review by COP and M & E Manager

BASELINE AND TARGETS: 2011 baseline of 82%. Target of 95% at the end of project

Location of Data Storage: Gisakura

Performance Indicator Reference Sheet
Number of target students participating in the program with USG assistance

Strategic Objective: Expanded economic opportunities in rural areas

Intermediate Result: Improved management of selected ecosystems

Program Objective: Economic Growth

Program Area: Environment Program

Program Element 4.8.1- Natural Resources and Biodiversity

Sub-Element4.8.1.2- Sustainable Natural Resources Management and Production

Indicator: Number of target students participating in the program with USG assistance

DESCRIPTION

Precise Definition(s): The total student population is 9,500 students, represented by the 10 pilot schools, which is 10% of total student population around NNP. Records of the number, sex and age of children participating in the program will be made

Unit of Measure: Number

Disaggregated by: Gender and age-class

Justification/Management Utility: An indicator measuring the reach or spread of USG human capacity building assistance through increasing awareness among school children.

PLAN FOR DATA ACQUISITION BY USAID

Data Collection Method: Records of attendance/registration

Data Source(s): Project reports

Frequency/Timing of Data Acquisition: Quarterly

Estimated Cost of Data Acquisition: Low

Responsible Individual(s) at USAID: AOR

PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING

Data Analysis: Internal and external reviews, briefings, and reports

Presentation of Data: Quarterly / Annual report

Review of Data: AOR Review

Reporting of Data: Quarterly / Annual report

DATA QUALITY ISSUES

Date of Initial Data Quality Assessment: January 2011

Known Data Limitations and Significance (if any): None

Actions Taken or Planned to Address Data Limitations: N/A

Date of Future Data Quality Assessments: To be confirmed with MEMS

Procedures for Future Data Quality Assessments: Annual review by COP and M & E Manager

BASELINE AND TARGETS: 2011 baseline of zero. Target of 4,000 students by year 4 of project (2,000 in year 3 and 2,000 in year 4)

Location of Data Storage: Gisakura

THIS SHEET LAST UPDATED ON: April 2012

Performance Indicator Reference Sheet
Number of target teachers/educators trained with USG support

Strategic Objective: Expanded economic opportunities in rural areas

Intermediate Result: Improved management of selected ecosystems
Program Objective: Economic Growth
Program Area: Environment Program
Program Element 4.8.1- Natural Resources and Biodiversity
Sub-Element4.8.1.2- Sustainable Natural Resources Management and Production
Indicator: Number of target teachers/educators trained with USG support

DESCRIPTION

Precise Definition(s): The number of school teachers and other educators trained to implement conservation education activities using materials developed by the program. At least 10 school teachers and 10 other educators will be trained in material / information dissemination.

Unit of Measure: Number

Disaggregated by: Gender

Justification/Management Utility: An indicator measuring the reach or spread of USG human capacity building assistance through providing teachers with the necessary skills to educate students on issues relevant to biodiversity conservation.

PLAN FOR DATA ACQUISITION BY USAID

Data Collection Method: Count of teachers participating/registered in program

Data Source(s): Project reports

Frequency/Timing of Data Acquisition: Quarterly and Yearly

Estimated Cost of Data Acquisition: Low

Responsible Individual(s) at USAID: AOR

PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING

Data Analysis: Simple count

Presentation of Data: Quarterly / Annual report

Review of Data: AOR review

Reporting of Data: Quarterly/ Annual report

DATA QUALITY ISSUES

Date of Initial Data Quality Assessment: January 2011

Known Data Limitations and Significance (if any): None

Actions Taken or Planned to Address Data Limitations: N/A

Date of Future Data Quality Assessments: To be confirmed with MEMS

Procedures for Future Data Quality Assessments: Annual review by COP and M & E Manager

BASELINE AND TARGETS: 2009 baseline was zero. Target of 20 educators trained in years 3 and 4

Location of Data Storage: Gisakura

THIS SHEET LAST UPDATED ON: April 2012

Performance Indicator Reference Sheet
Percentage of surveyed community members who have a supportive attitude toward NNP

Strategic Objective: Expanded economic opportunities in rural areas
Intermediate Result: Improved management of selected ecosystems
Program Objective: Economic Growth
Program Area: Environment Program
Program Element 4.8.1- Natural Resources and Biodiversity
Sub-Element4.8.1.2- Sustainable Natural Resources Management and Production
Indicator: % of surveyed community members who have supportive attitude towards NNP

DESCRIPTION

Precise Definition(s): Percentage of 200 community members surveyed who exhibit a positive change in ascribing value to NNP as measured by their response based on the assessment of value based on the park as 1) a home for animals, 2) a tourist destination, 3) an important source of water, 4) an important source of clean air, 5) the role it plays in absorbing carbon and reducing global warming, 6) providing aesthetic /scenic /peaceful value, 7) providing soil services, and 8) providing educational value.

Unit of Measure: Percentage

Disaggregated by: N/A

Justification/Management Utility: An indicator measuring the effectiveness of education and outreach efforts by assessing the change in attitude towards the park. The difference between baseline and post project responses by students describing how they attribute value to the park will establish whether the project has had a positive influence in changing attitudes. An improvement in the value that these groups ascribe to the park is expected to ultimately lead to better practices.

PLAN FOR DATA ACQUISITION BY USAID

Data Collection Method: Surveys

Data Source(s): Project reports

Frequency/Timing of Data Acquisition: Baseline established in 2011, to be repeated in final year of the project

Estimated Cost of Data Acquisition: Medium

Responsible Individual(s) at USAID: AOR

PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING

Data Analysis: Internal and external reviews, briefings, and reports

Presentation of Data: Annual report

Review of Data: AOR review

Reporting of Data: Annual report

DATA QUALITY ISSUES

Date of Initial Data Quality Assessment: January 2011

Known Data Limitations and Significance (if any): None

Actions Taken or Planned to Address Data Limitations: N/A

Date of Future Data Quality Assessments: To be confirmed with MEMS

Procedures for Future Data Quality Assess: Annual review by COP and M & E Manager

BASELINE AND TARGETS: 2011 baseline was 72%. Target of 95% by the end of project

Location of Data Storage: Gisakura

THIS SHEET LAST UPDATED ON: April 2012

Performance Indicator Reference Sheet

Number of individuals from all target user groups participating in the program with USG assistance

Strategic Objective: Expanded economic opportunities in rural areas
Intermediate Result: Improved management of selected ecosystems
Program Objective: Economic Growth
Program Area: Environment Program
Program Element 4.8.1- Natural Resources and Biodiversity
Sub-Element4.8.1.2- Sustainable Natural Resources Management and Production
Indicator: Number of individuals from all target user groups participating in the program with USG assistance

DESCRIPTION

Precise Definition(s): Target user groups are groups that have a clear negative influence on the conservation of Nyungwe National Park (for example, bamboo harvesters, poachers, illegal honey harvesters etc).

Unit of Measure: Number

Disaggregated by: N/A

Justification/Management Utility: An indicator measuring the reach or spread of USG human capacity building assistance through increasing awareness among user groups

PLAN FOR DATA ACQUISITION BY USAID

Data Collection Method: Simple count

Data Source(s): Project reports/RDB records

Frequency/Timing of Data Acquisition: Quarterly / Yearly

Estimated Cost of Data Acquisition: Low

Responsible Individual(s) at USAID: AOR

PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING

Data Analysis: Internal and external reviews, briefings, and reports

Presentation of Data: Quarterly / Annual report

Review of Data: AOR review

Reporting of Data: Quarterly / Annual report

DATA QUALITY ISSUES

Date of Initial Data Quality Assessment: January 2011
Known Data Limitations and Significance (if any): None
Actions Taken or Planned to Address Data Limitations: N/A
Date of Future Data Quality Assessments: To be confirmed with MEMS
Procedures for Future Data Quality Assessments: Annual review by COP and M & E Manager

BASELINE AND TARGETS: 2011 baseline was zero. Target of 1,000 per year in years 3, 4 and 5

Location of Data Storage: Gisakura

THIS SHEET LAST UPDATED ON: April 2012

Performance Indicator Reference Sheet
Number of target community educators and communicators trained with USG support

Strategic Objective: SO7 Indicator, Expanded economic opportunities in rural areas

Intermediate Result: Improved management of selected ecosystems
Program Objective: Economic Growth
Program Area: Environment Program
Program Element 4.8.1- Natural Resources and Biodiversity
Sub-Element4.8.1.2- Sustainable Natural Resources Management and Production
Indicator: Number of target community educators and communicators trained with USG support

DESCRIPTION

Precise Definition(s): Educators are composed of both ANICO's (Animateur de Conservation) and District Environmental Officers (DEO's). Both ANICO and DEO's will be trained in using and disseminating conservation education materials with target audiences.

Unit of Measure: Number

Disaggregated by: Gender

Justification/Management Utility: An indicator measuring the reach or spread of USG human capacity building assistance through providing educators with the necessary skills to educate vulnerable groups on issues relevant to biodiversity conservation.

PLAN FOR DATA ACQUISITION BY USAID

Data Collection Method: Count of educators participating/registered in program

Data Source(s): Project reports

Frequency/Timing of Data Acquisition: Quarterly

Estimated Cost of Data Acquisition: Low

Responsible Individual(s) at USAID: AOR

PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING

Data Analysis: Internal and external reviews, briefings, and reports

Presentation of Data: Quarterly/ Annual report

Review of Data: AOR review

Reporting of Data: Quarterly/ Annual report

DATA QUALITY ISSUES

Date of Initial Data Quality Assessment: January 2011

Known Data Limitations and Significance (if any): None

Actions Taken or Planned to Address Data Limitations: N/A

Date of Future Data Quality Assessments: To be confirmed with MEMS

Procedures for Future Data Quality Assessments: Annual review by COP and M & E Manager

BASELINE AND TARGETS: 2011 baseline was zero. Target of 58 individuals trained each year in years 3, 4 and 5

Location of Data Storage: Gisakura

THIS SHEET LAST UPDATED ON: April 2012